



Place this slide after slide 7. Entitle it: City Creek, 2003

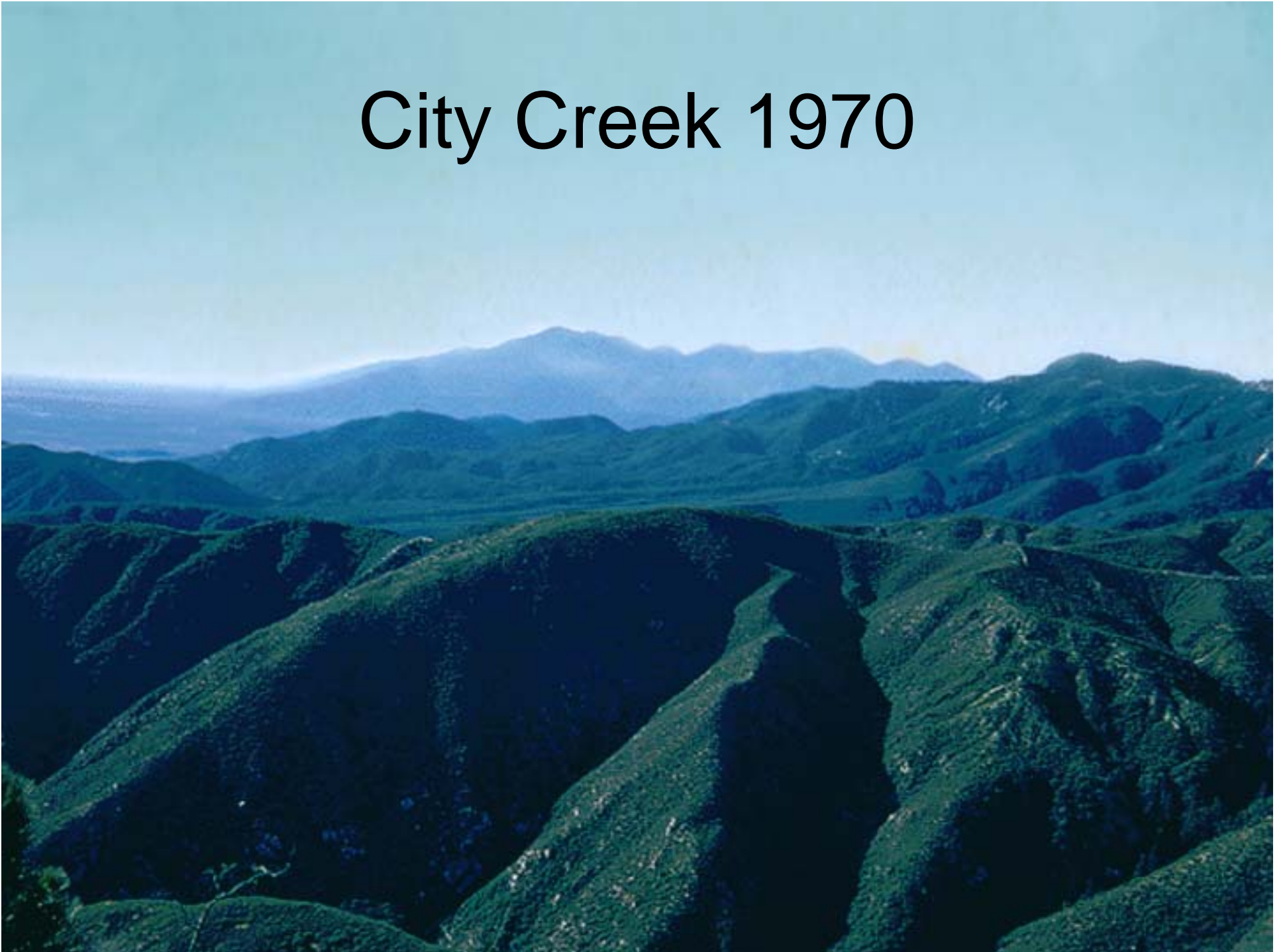


# City Creek 1960 (1956 Burn)





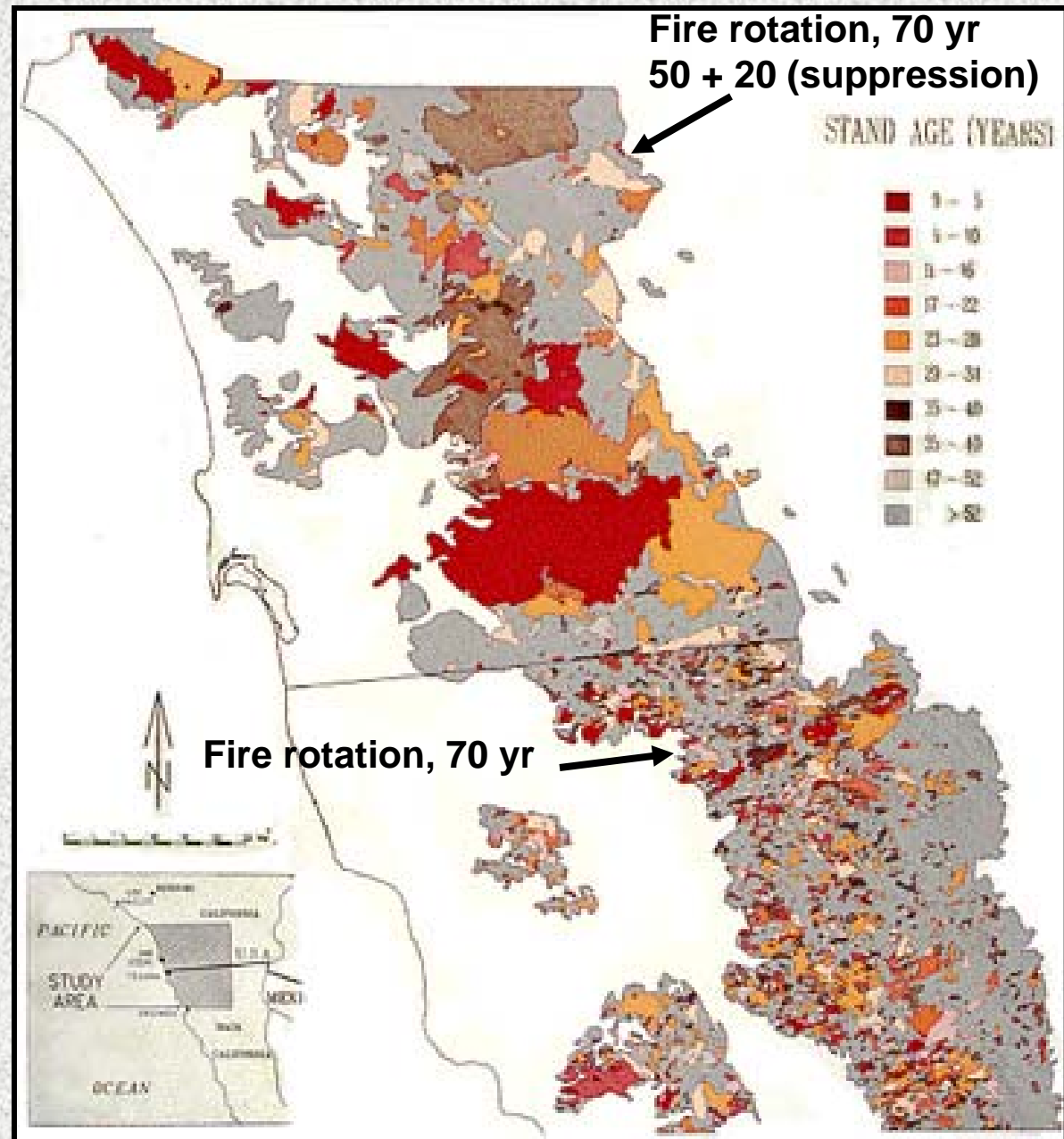
# City Creek 1970



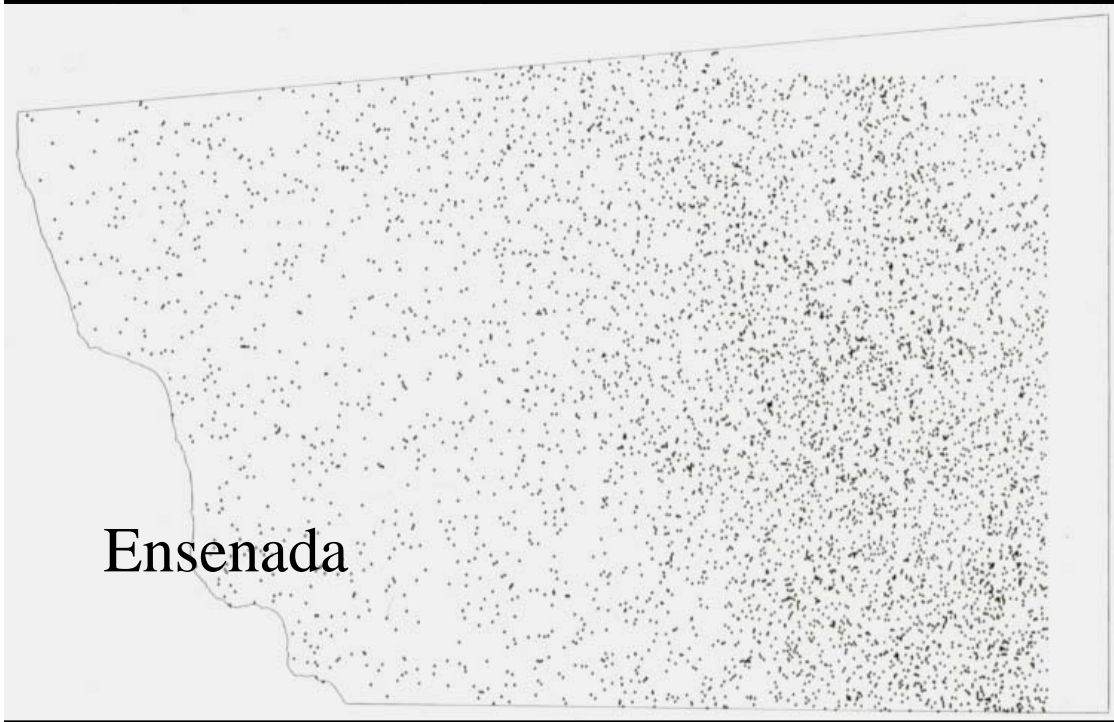
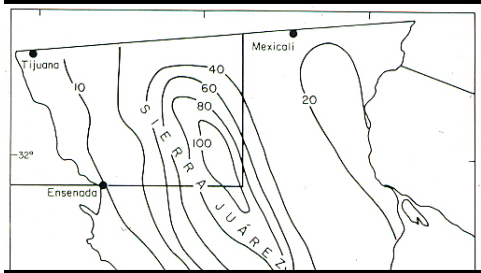
## City Creek 1995



**Negative  
feedback  
between  
fire frequency  
and size  
due to patch  
fragmentation**





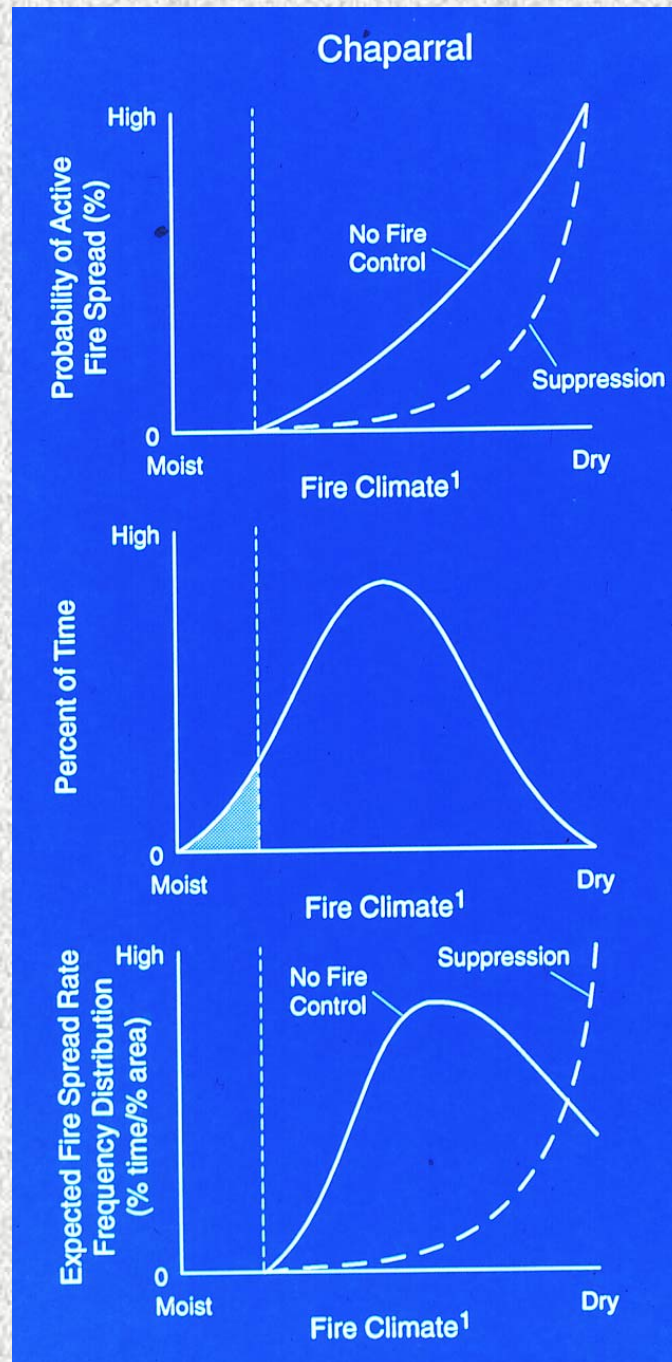


**IGNITION RATES (LIGHTNING FLUX = 0.5 to 3.0 km<sup>2</sup> yr<sup>1</sup>)**  
**The influence of human ignitions**

Fire spread rates →

Climate →

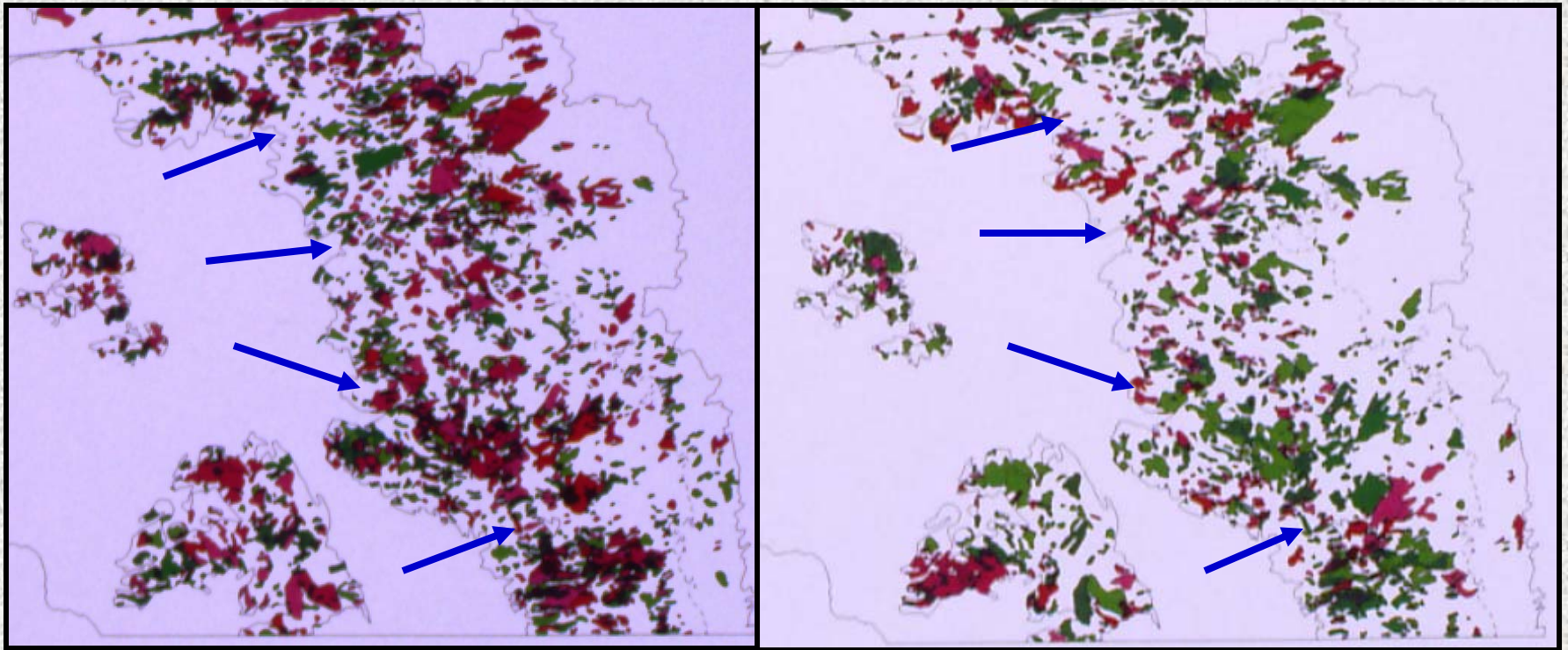
Landscape spread rates →



# Fire weather:

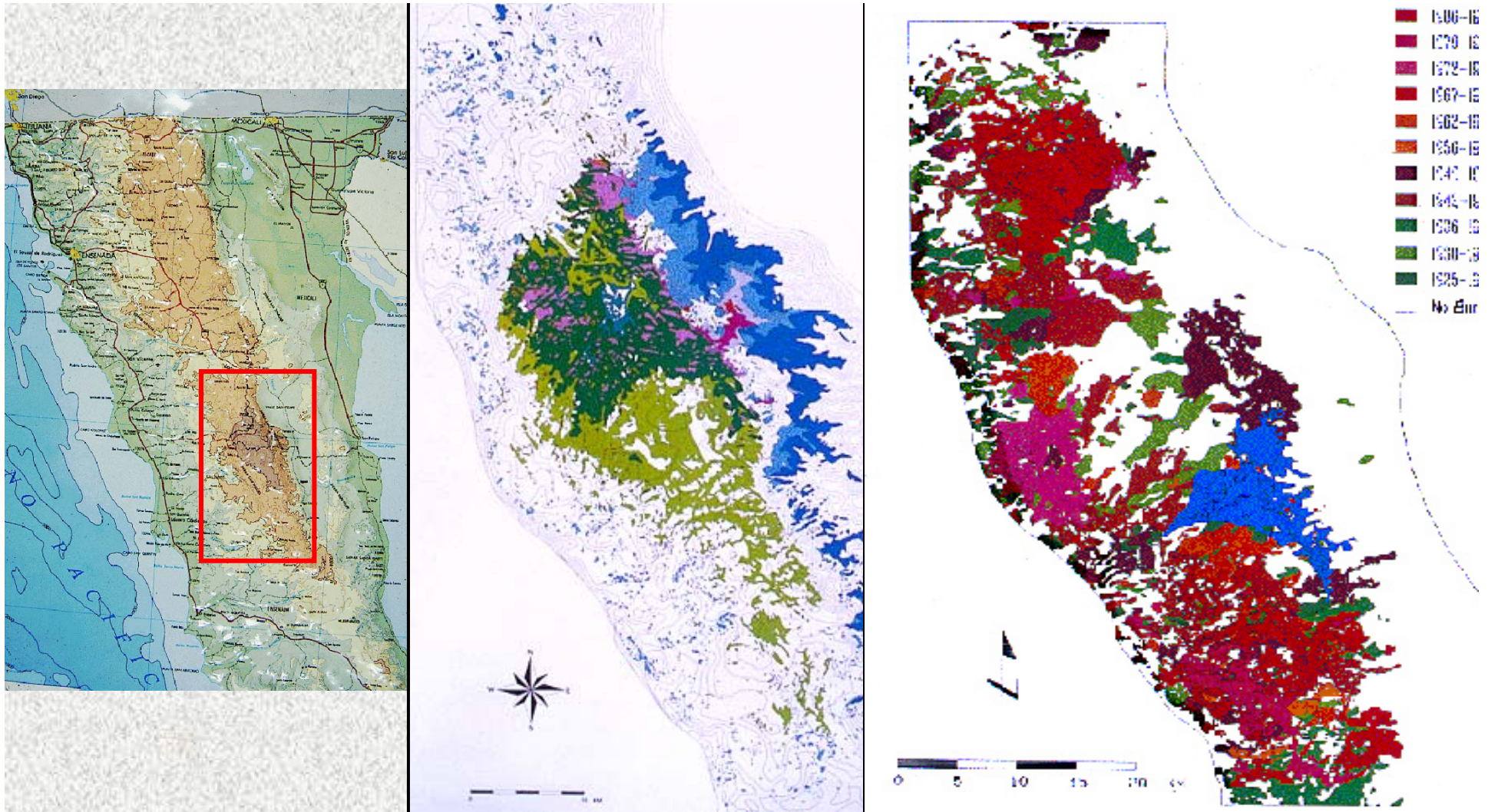
**Non-randomization  
of large fires to  
the most severe  
weather risk states.**





**Fire orientation  
and slope winds**





**Sierra San Pedro Martir**  
**Fire interval, 50 years**





**Subcanopy burns  
in open mixed-  
conifer forest**







**Succession of shrubs and trees**



**Renewal of open forest**



**Hot understory  
fires**



# Cuyamaca State Park

4,000 ha of Sierran  
mixed-conifer forest  
stand-replaced





## Sierran mixed-conifer forest



Lake Arrowhead, Sep 2003





**Twin Peaks, Nov 2003**





**Sierra San Pedro Martir**  
(open forest resistant to the drought of 2003)





**La Grulla**







**Santa Rosa**



